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Patent Abstracts of Japan

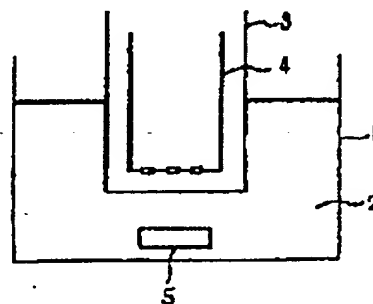
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 PATENTEE : SEIKO INSTR INC
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TITLE : ELECTROCHEMICAL REACTION
 MEASURING DEVICE



ABSTRACT : PURPOSE: To measure the current, which really flows in a part where an electrochemical reaction is generated, at high sensitivity by using a measuring device with a high sensitivity magnetic sensor which uses Josephson effect.

CONSTITUTION: A reaction cell 1 holds the solution 2, and a magnetic field or inclination of the magnetic field is measured by a measuring device 4, which is located in a dewar 3 made of the chemically non-active material, with Josephson effect. The dewar 3 is soaked in the solution 2. When an electrochemical reaction is generated in the surface of a sample 5, the material having an electric charge is moved to generate a magnetic field in the surroundings. This magnetic field is measured by a measuring device 4, and this measurement data is analyzed to know that what degree of electrochemical reaction is generated in what part of the surface of the sample 5.

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